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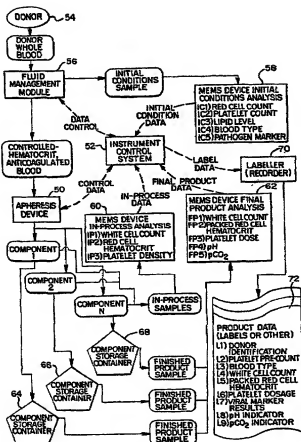
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(54) Title: MEDICAL SYSTEM, METHOD AND APPARATUS EMPLOYING MEMS



(57) **Abstract:** A biological suspension processing system is disclosed that may include a suspension treatment device for treating one or more components of a biological suspension, a first fluid flow path for introducing a suspension into the treatment device and a second fluid flow path for withdrawing a constituent of the suspension from the device. At least one micro-electromechanical (MEM) sensor communicates with one of the fluid flow paths for sensing a located characteristic of the fluid therewith. The MEM sensor may be located elsewhere, such as on a container or bag and communicate with the interior for sensing a characteristic of the fluid contained therein. A wide variety of characteristics may be sensed, such as flow rate, pH, cell type, cell antigenicity, DNA, viral or bacterial presence, cholesterol, hematocrit, cell concentration, cell count, partial pressure, pathogen presence, or viscosity.

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